



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
WASHINGTON, D.C. 20460

OFFICE OF  
SOLID WASTE AND EMERGENCY  
RESPONSE

June 21, 2007

Mr. Charles L. Miller, Director  
Office of Federal and State Materials  
and Environmental Management Programs  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Dear Mr. Miller:

I am writing in response to your letter of March 23, 2007, regarding the Battelle Memorial Institute's (BMI's) former North Nuclear Sciences site, in West Jefferson, Ohio. The March 23 letter notified EPA that the Battelle site would have triggered a Nuclear Regulatory Commission (NRC) consultation with EPA in accordance with the 2002 Memorandum of Understanding (MOU) entitled: "[Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites](#)" (OSWER No. 9295.8-06, signed by EPA on September 6, 2002, and NRC on October 9, 2002). This letter responds to the notification in accordance with Section V.D.1 of the MOU, when NRC requests EPA's consultation on a decommissioning plan or a license termination plan, EPA is obligated to provide written notification of its views within 90 days of NRC's notice.

Your letter constitutes a Level 2 consultation as specified in the MOU because the consultation is concerning residual radioactive contamination remaining after completion of the Final Status Survey (FSS).

The views expressed by EPA in this letter regarding NRC's decommissioning are limited to discussions related to the MOU. The comments provided here do not constitute guidance related to the cleanup of sites under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authority.<sup>1</sup> EPA's views on the matters addressed by this letter were developed from information furnished by NRC in the March 23 letter, other materials provided by NRC, and staff discussions.

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<sup>1</sup> Please see the memorandum entitled: "[Distribution of Memorandum of Understanding between EPA and the Nuclear Regulatory Commission](#)" (OSWER No. 9295.8-06a, October 9, 2002) which includes guidance to the EPA Regions to facilitate Regional compliance with the MOU and to clarify that the MOU does not affect CERCLA actions that do not involve NRC (e.g., the MOU does not establish cleanup levels for CERCLA sites). This memorandum may be found on the Internet at: <http://www.epa.gov/superfund/resources/radiation/pdf/transmou2fin.pdf>.

## **EPA Consultation Views**

Today's response is limited to those matters that initiated NRC's request for consultation in its letter of March 23. NRC initiated this consultation because the MOU trigger values for strontium-90 in groundwater were found to exceed maximum contaminant levels (MCLs) established under the Safe Drinking Water Act (SDWA) after the Final Status Survey (FSS). EPA's views that are provided to NRC in this letter are based on how EPA addresses groundwater use determinations at CERCLA sites.

### **EPA Policy on Ground water:**

"EPA expects to return usable ground waters to their beneficial uses whenever practicable." (see 40 CFR §300.430(a)(1)(iii)(F)). In general, drinking water standards such as MCLs provide relevant and appropriate cleanup levels for ground waters that are a current or potential source of drinking water. However, drinking water standards such as MCLs generally are not relevant and appropriate for ground waters that are not a current or potential source of drinking water (see 55 FR 8732, March 8, 1990).

EPA issued guidance concerning ground water use determinations in a memo from Office of Solid Waste and Emergency Response Assistant Administrator to the Regions entitled "[The Role of CSGWPPs in EPA Remediation Programs](#)" (OSWER Directive 9283.1-09), April 4, 1997. This guidance states that EPA generally defers to State determination of current and future groundwater uses, when the State has a Comprehensive State Ground Water Protection Program (CSGWPP) that has been endorsed by EPA and has provisions for site specific decisions. For States that do not have an EPA-endorsed CSGWPP (or whose CSGWPPs do not have provisions for making site-specific determinations of groundwater use, resource value, priority or vulnerability), EPA uses either "EPA Guidelines for Ground-Water Classification" (Final Draft, December 1986), or State groundwater classifications or similar State designations, whichever classification scheme leads to more stringent remediation goals.

### **NRC Groundwater Determination at Batelle:**

The State of Ohio does not have an EPA endorsed CSGWPP. The NRC licensee did seek a review by the Ohio Department of Health of its "Safety Evaluation for License Amendment No. 32 to Special Nuclear Materials License No. SNM-00007." This document included NRC's rationale for its determination that at the Batelle site the groundwater with strontium exceeding the MCLs was not a potential or current source of drinking water. NRC stated that the Bog Area groundwater had too low a yield and too shallow a depth to be a source of drinking water. In addition, NRC stated that any drinking water wells placed there would not comply with Ohio regulations to be screened at a depth of at least 25 feet. NRC had reviewed these drinking water well regulations (see Ohio Administrative Code 3745-9-05), and NRC stated that the licensee had consulted with the Ohio Environmental Protection Agency (Ohio EPA) on these regulations. The Ohio Department of Health (DOH) responded that it found NRC's document to be comprehensive and that it did not have any comments.<sup>2</sup>

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<sup>2</sup> See [email from Chuck McCracken, Ohio Department of Health to George McCann, NRC](#), on November 2, 2006.

EPA is concerned that in making its groundwater use determination for the Battelle site, NRC has not considered EPA's guidance document "EPA Guidelines for Ground-Water Classifications" nor consulted with Ohio EPA. In EPA's view, NRC should use EPA's guidance document to determine if the groundwater at Battelle is a Class III aquifer and, therefore, not a potential source of drinking water. Further, in EPA's view, NRC should consult with Ohio EPA on NRC's groundwater use determinations since this is the state agency generally responsible for groundwater protection in Ohio. Mike Baker is the director of Ohio EPA's Division of Drinking and Groundwaters, which makes groundwater determinations for Ohio EPA. It is my understanding that your staff are already working to address the concerns EPA has raised in this letter.

### **Conclusion**

EPA staff are available to NRC for consultation if needed at the Site. If you have any questions regarding this letter, please contact me or have your staff contact Stuart Walker of my staff at (703) 603-8748.

Sincerely,

/S/ jew

James E. Woolford, Director  
Office of Superfund Remediation and  
Technology Innovation